

## Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.



UNITED STATES DEPARTMENT OF AGRICULTURE  
SYLLABUS 28

Contribution from the States Relations Service  
A. C. TRUE, Director  
In Cooperation with the Bureau of Plant Industry  
W. A. TAYLOR, Chief



Washington, D. C.



May 11, 1917

ILLUSTRATED LECTURE  
ON PRACTICAL IMPROVEMENT OF  
FARM GROUNDS

By

F. L. MULFORD, Horticulturist, Horticultural and  
Pomological Investigations, Bureau of Plant Industry,  
and H. M. CONOLLY, Assistant Horticulturist in Agri-  
cultural Education, States Relations Service

CONTENTS

	Page		Page
Introduction . . . . .	1	The Lawn . . . . .	5
The Buildings . . . . .	2	Plantings . . . . .	6
The Grounds . . . . .	3	Conclusion . . . . .	10
Walks and Drives . . . . .	4	Appendix . . . . .	11
Entrances . . . . .	5		



WASHINGTON  
GOVERNMENT PRINTING OFFICE  
1917



# U. S. DEPARTMENT OF AGRICULTURE,

## STATES RELATIONS SERVICE.

A. C. TRUE, Director.

In cooperation with the Bureau of Plant Industry, W. A. Taylor, Chief.

### SYLLABUS 28—ILLUSTRATED LECTURE ON PRACTICAL IMPROVEMENT OF FARM GROUNDS.<sup>1</sup>

By F. L. MULFORD, *Horticulturist, Horticultural and Pomological Investigations, Bureau of Plant Industry*, and H. M. CONOLLY, *Assistant Horticulturist in Agricultural Education, States Relations Service*.

#### INTRODUCTION.

The grounds and surroundings of the farm home should be very attractive, for it is situated in the country where plants and pleasant views abound, and, too, the home gives an insight into the character of the people who live there. Good buildings well situated with attractive grounds indicate that the people are progressive, prosperous, and cultured. Farm buildings with the surroundings destitute of plantings or with littered-up grounds will give just the opposite impression.

The farm home is the abiding place of the children for a number of years, and in this home are received the early impressions of life. The home is also a great factor in the education of the children, for education consists of experiences or things that are seen as well as those that are read about.

The aim, then, should be to surround the children with the things that will teach them. A good house with attractive grounds will appeal to them, and gardens of fruits, vegetables, and flowers will show them how to grow plants and also encourage a love for farm life.

<sup>1</sup> This syllabus has been prepared by direct cooperation between the Division of Horticultural and Pomological Investigations of the Bureau of Plant Industry, as regards subject matter, and J. M. Stedman, Farmers' Institute Specialist of the States Relations Service, as regards pedagogical form. It is designed to aid farmers' institute and other extension lecturers in presenting this subject before popular audiences. The syllabus is illustrated with 51 lantern slides. The numbers in the margins of the pages refer to the lantern slides as listed in the Appendix.

View.

If your place does not give the right impression to the public and does not instill in the children a love for the farm, then it is time to make a change and correct the evil. It is within the reach of everyone to have an attractive home, surrounded by nature's materials. It requires only a little thought, a little knowledge, and a little labor to accomplish this.

## THE BUILDINGS.

### LOCATION FOR THE HOUSE.

In developing a new place one of the first things to consider is the location of the buildings. The house, of course, is the most important building, therefore its proper location should be considered first. Where the country is flat or gently rolling the house may be placed where it is convenient to the various parts of the farm and where it is within easy access to the public road. Where there is a slight elevation or a shade tree, these should also be considered. In a rough, broken country the house should be located where it is accessible to the farm and to the public road, where it is possible easily to construct and maintain the walks and drives, and where a good outlook may be obtained over the immediate vicinity and the distant surroundings.

### EXPOSURE FOR THE HOUSE.

The living room should be so located as to get plenty of sunshine during a portion of the day and to receive the benefit of the prevailing summer winds. When a good view can be obtained it should go a long way toward determining the location of the house. It is also important that the workrooms should have a view of the other buildings. Shade trees are an important factor in deciding the location of the house. If none of the above factors exist, then for most sections of the country an eastern exposure for the living portion of the house is to be preferred.

### LOCATION OF THE BARNS.

When the location of the house has been selected the other farm buildings may be located with reference to it. Very often it is preferable to have the barn and other buildings to the side and rear of the house, where they are convenient both to the farm and to the house, but where the prevailing summer winds will not blow from the barns to the house and where the unsightly features may be screened from view. Ordinarily it is best to locate the barns at least 100 feet from the house, so



there will be less danger from fire. It is also advisable to group the smaller buildings around the barns and not around the house.

#### TYPE OF HOUSE.

Whenever practicable the farmhouse should be one with low, broad lines, for this type of house fits in well with the country surroundings. A tall narrow house does not harmonize with a farm landscape, and it is hard to subdue the lines with plantings. The house should be simple in design, planned for the comfort and use of the family in its every-day life, and not for show or to provide conventional facilities for the entertainment of occasional visitors. The simpler the style of the house the cheaper it can be constructed and maintained, the better it will look if well done, and the easier it can be beautified by vines and plantings.

The barns and outbuildings should all be simple in design, neatly constructed, and supplied with ample facilities for sanitation.

On farms where the buildings have already been established and where no reasonable changes can be made, the problem of improvement consists in making the surroundings neat and doing such other planning and planting as is possible under the conditions that exist.

#### THE GROUNDS.

##### SIZE OF GROUNDS.

The factor of maintenance should receive considerable attention in the laying out of home grounds. The size of the grounds should be governed by the uses to which they are to be put and by the amount of labor or expense that can be allowed for keeping them in good order. Small grounds can often be so planned that a good setting for the house is secured and ample provision made for lawns, gardens, etc. In many instances it is possible to use land adjacent to the farmstead for hay or pasture, and in this way it may be utilized practically as a part of the lawn. Large grounds require a great deal of care to keep them neat in appearance, but in many places the labor of mowing may be reduced to a minimum by establishing a sheep or cattle pasture as an extension of an otherwise small lawn. If cattle are pastured on the land, care must be taken to spread the manure, or a patchy appearance will result. On the majority of farms 2 acres will be found sufficient for all the needs of the farmstead.

8

9

10

11

12

## ARRANGEMENT.

View.

A great deal of the success in improving the farm grounds depends upon their proper arrangement. Gardens for fruits, vegetables, and flowers should be provided, and they should be located near the house, where they will not only be convenient but where they can be made a very attractive part of the grounds. The space for the gardens need not be very large, for three-fourths of an acre to an acre will furnish about all the fruit and vegetables a farmer's family will need. The fruit orchard may also be utilized as a chicken run.

A feature often overlooked in arranging the farm home is recreation grounds. A small area, either on the lawn or off at one side of the house, where it is easily accessible, should be set aside for a tennis court, a basket-ball court, a croquet ground, or similar use. The children will enjoy this ground, and it will do much to keep them contented and happy on the farm.

Provision should also be made for a clothes yard, or a place partially secluded where clothes may be hung out to dry, and for a service yard, where wood may be conveniently piled for use. If there is a pond or water hole near the buildings the grounds should be arranged to include this, so that it may be beautified and not become an eyesore.

## CARE.

A great share of the work of improving home grounds is that done to give the place a neat appearance. The grounds may be very well planted with shrubs and trees, but if neglect is evident much of the attractiveness is lost. On the other hand, a place may have only a tree or two, and may even have a poor lawn, and yet if the lawn is kept mowed and everything picked up, the appearance may be very good indeed. Care in making the grounds attractive should also include making the buildings attractive. All advertising should be positively excluded unless it might be a neat notice bearing the name of the farm and its special products.

## WALKS AND DRIVES.

All walks and drives should be constructed for service, but there is no good reason why they should not be so located as to detract as little as possible from the beauty of the grounds. They should follow the contour of the land wherever possible to secure ease of construction and maintenance, and usually they will be more attractive so located. Where there is only a



slight slope it is preferable to place the drive at one side of the grounds and make a gentle curve toward the house. This avoids cutting up the lawn and renders the drive less conspicuous. Whenever a very short distance, say less than 50 feet, is to be traveled, a straight walk or drive may be constructed, but for longer distances light curves are more desirable. As few walks and drives as possible should be used, and these should be located where they are needed for travel, but they should not be conspicuous nor should they bisect the lawn. It is well to construct the walks and drives of material that is not very showy. Cinders and gravel are much less conspicuous than concrete and crushed limestone.

### ENTRANCES.

The entrance to the farm grounds should be conveniently located to accommodate the travel. It is usually better to have the entrance at one side of the place, where a direct road to the barn will pass by the side of the house near the entrance door. By locating the entrance at one side of the grounds it is possible to curve the road gently toward the house and avoid bisecting the lawn.

The entranceway or gateway should be in keeping with the character of the place. Unless the grounds are of large extent and kept up like a park or country estate, a large ornamental gateway should never be constructed. A simple gateway with posts of wood or rough field stone with a serviceable gate will form an attractive feature. Often a clump of shrubs at each side of the entranceway or a tree on each side will add to its appearance. Simplicity should always be the keynote in any type of entrance to the farm grounds.

### THE LAWN.

A good lawn is one of the important requirements for attractive home grounds. There may be fine shade trees and excellent plantings of shrubbery and flowers, but unless there is a good lawn the whole effect is impaired. The pleasing effect of a lawn is due to an even stand of grass of a uniform color and texture, kept closely mown. This effect, together with ease of maintenance over a period of years, can be secured only by proper construction and by good maintenance from the time the lawn is started.

In starting a lawn it is necessary to have a good seed bed. Deep cultivation and thorough preparation with an abundance

View.

22

23

24

25

26

27

28

29

30

31

View.

of plant food are very essential. All the requirements of a well-prepared garden soil should be followed in preparing the seed bed.

Much of the success in establishing a lawn depends upon the seed and the proper selection of the grasses that are used. A good seed mixture for most parts of the Northern and Eastern States or elsewhere when irrigation is possible would be two parts by weight of re-cleaned Kentucky bluegrass to one part of fancy redtop. From 50 to 100 pounds per acre of this mixture, or one-third to two-thirds of a pound to each square rod, should be used. For very sandy sections like those along the Atlantic coast, and for shady locations, more general mixtures will, no doubt, give better results. For the South, Bermuda grass or carpet grass are probably the most useful lawn grasses, and a lawn is usually established by planting small pieces of one of these sods. White clover is quite commonly used throughout the North as a nurse crop for the other grasses. It is seeded in the spring, using 10 pounds to the acre, or 1 ounce to each square rod.

If a lawn is already established and parts of it are thin, it is possible to rake over the barren spots and sow grass seed. In many cases pieces of sod may be set in the bare places. If the lawn is three-fourths bare it is usually better to plow it up and start a new lawn. Oftentimes old lawns in which the soil is inclined to be sour may be greatly improved by liming.

## PLANTINGS.

### THE PLAN.

All plants should be set out with a definite purpose in view, for only in this way is it possible to secure the desired effect. Before starting to plant it is a good plan to sketch out on paper a rough plan of the grounds, with the changes that are to be made and the kinds and number of plants to be used. By making a plan it is possible to cut and try until it is thoroughly settled just what results it is desired to secure. From the plan it is also possible to plant a little each year until the whole is finished, and the result will be a completed composition and not a collection of unrelated parts, as it might be if no plan were followed.

Some of the purposes that one should have in mind when planting are: To screen from view all objectionable objects, to frame vistas of good views, to border the lawns, to tie the house to the ground, to accentuate or subdue the lines of the house, and to give shade, color, and variety to the grounds.

## WHERE TO PLANT.

View.

The proper locations for the plants are determined by the purpose that they are to serve. Groups of trees or shrubbery should be set in positions where they will hide objectionable views, such as dilapidated buildings, barnyards, or heaps of discarded tools. 32

Trees may be placed so that they will afford a vista for some beautiful scene, as woods, fields, or hills. 33, 34, 35

Plantings should be placed to screen from view the clothes yard or service yard, but these yards should not be cut up by numerous shrubs and beds of flowers. 36  
37

The lawn should not be cut up by scattering specimen plants about it, but these plants should be set around the border to make and enhance the beauty of a large open area. Plants may also be set in the curves of the walks and drives where they will add interest and color to the grounds. 38

All statuary, flower beds, or ornaments should be excluded from the lawn, as they detract from its beauty. In planting the flower borders it is a good plan to plant in masses, with bays and hollows where flowers may be massed against the green of the shrubbery. 39  
40

Planting should be done in the hollows by the steps, in the angles and at the corners of the house, and around its base, for these plantings will tie the house to the ground and make it appear as if set on a bank of green.

Vines should be made to run over the porch to give shade and privacy. Vines may also be planted about the walls of the house and trained so as to subdue harsh architectural features. 41  
42

Trees may be set about the grounds to provide shade and protection from storms. Care should be taken, however, to locate them where they will not hide desirable views. 43

In sections where rocks are numerous it is often impossible to clear them all away, but this should not be a discouragement, for it is possible to place a little soil among the rocks and set in these places many interesting plants. 44

A pergola with vines climbing over it may be made a very interesting feature, provided it is located as an entrance to the garden or is a feature of the back yard or garden. A pergola usually loses its attractiveness when constructed on an open lawn or at the street entrance to the grounds. 45

## PLANTS TO USE.

What to plant depends a great deal upon the soil conditions and upon the location and climate, but there are many plants

View.

that will succeed under a great variety of conditions. In selecting plants do not get a nursery catalogue and order some of everything in it, for what you wish is attractive grounds and not a botanical garden. Buy only a few varieties and only those that are known to do well in your own locality. Such shrubs as spirea, privet, dogwood, barberry, honeysuckle, hydrangea, mock orange, wild rose, and forsythia will grow almost anywhere from North to South, and some or all of them should be planted about every farmhouse.

It should be the aim to have color and variety in the grounds throughout the year. To secure this object some plants, such as the coniferous evergreens and broad-leaved evergreen shrubs, which give touches of color even in the winter when nature is gray, should be included in the selection.

46 By all means go to the woods and fields for many of the plants, for there you are sure to find many that will repay in a riotous profusion of bloom the effort it took to bring them from the wild and plant them in good soil in the grounds.

Some plants are set for color and some for variety, but there are others that are planted for shade. The trees should not be left out, because they give some of the prettiest pictures in nature. What adds more to the comfort and beauty of a home than large, wide-spreading shade trees? They should 47 stand for many years, so it is not advisable to waste time and labor by planting brittle, short-lived trees. Trees like the oaks, elms, and hard maples should be used, while trees like the poplar, china berry, water oak, etc., should not be planted.

Vines should not be forgotten, for they are nature's draperies. In no other way can the home be as cheaply and as beautifully decorated as by the use of vines. The vines should not be left to run at will so that they cover up openings where light should have access, but they should be trained to the 48 places where they are desired. The true functions of vines are to soften the lines of columns, shade the porches, cover ugly appearing walls and fences, and take away the harsh lines of the house. What is more suitable for covering the porch than clematis, honeysuckle, wisteria, or bignonia? What will cover unsightly walls as English ivy, trumpet creeper, or climbing roses? There are dozens of vines, each having some use for which it is admirably adapted, such as the Boston ivy for brick and stone buildings, the coral honeysuckle for columns and trees, the kudzu for its quick-covering effect, and the jasmine for fragrance. The vines can be used in profusion when covering unsightly places, but on the walls and porches of the house they should be restricted.



The herbaceous perennials are as a rule the best flowers to grow. By perennials is meant the plants that die down in the fall and start growth again the next spring, living from year to year. These plants require little care, give an abundance of flowers of every imaginable color, and if taken up every three or four years the plants can be divided and the supply greatly increased. Some of the best of the perennials are peonies, iris, phlox, larkspur, foxglove, sweet-william, columbine, etc.

The annuals are for temporary use, to fill in between other plants, to furnish needed shades of colors, and to supply bloom at certain periods when other flowers are gone.

49

#### TIME TO PLANT.

The time to plant is pretty well limited by the weather conditions. In the Southern States planting time is from November to March, while in the Northern States the period runs from October to December, and from March to May or June. The main point in the time of planting is to move plants when they are dormant and to plant when it is possible to work the ground easily.

#### HOW TO PLANT.

It is a waste of time and energy to set plants in an indifferent way. The soil should be rich and well-prepared to give the plants a good start the first year, after which they will soon grow into usefulness and beauty. For successful planting of trees and shrubbery it is necessary to follow these rules:

Procure goods plants.

Keep the roots covered to prevent them from drying out while waiting to be planted.

Dig the holes large enough so that the roots may be placed without bending and crowding, and deep enough so that the plants will set 2 inches deeper than they stood in the nursery.

Pack rich black earth firmly around the roots of the plant.

Prune the tops of the plants to correspond with the roots that were destroyed in digging.

Leave a loose covering of earth around the plant after the hole has been filled.

Use strawy manure as mulch around the plant instead of mixing it with the earth around the roots.

Mix commercial fertilizer with the soil before planting the tree or shrub.

When plants are to be set in sodded ground it is a good plan to remove the sod from the entire area to be planted. Do not expect good results if plants are set in small holes dug in the sod.



View.

## COST OF PLANTING.

50 The cost of improving the farm grounds need not be any more than the farmer wishes to pay. A very few cents for some flower or grass seed with a little study and some labor will give wonderful results. A few trees brought from the woodland will cost nothing, and many native shrubs like dogwood, elder, sumac, snowberry, nannyberry, redbud, etc., may also be had for the energy it takes to bring them from the woods. Such vines as bittersweet, five-leaved ivy, honeysuckle, clematis, etc., can also be procured at no expense and along with them ferns, goldenrod, yarrow, violets, etc. Many farm-home grounds have been improved and beautified with these native plants and the cost has been nothing but the labor expended.

## CONCLUSION.

51 All should be interested in making the farm-home grounds attractive and interesting, for in so doing it is possible not only to broaden and brighten our own lives but to influence the lives of our children as well. Life in the country offers many advantages to both children and adults, provided the right kind of conditions are furnished; and attractive homes, the remembrance of which will cling throughout life, are a most important part of wholesome living conditions.

## APPENDIX.

### LANTERN SLIDES.

No. of  
view.

1. A country road.  
Many beautiful views and many useful trees and plants are found here that should also be found around the country home.
2. A farm home.  
Neatness with the comfort of shade trees and grass are found here.
3. A farm house.  
Note the lack of shade, lawn, flowers, and everything that goes to make a home.
4. Flowering plants, trees, and shrubbery that will teach the children to love plants and the farm.
5. A house situated near the public road and also on a slight elevation, so that it overlooks the farm.
6. This house would no doubt have been as convenient to the public road and the farm if it had been turned a quarter way around.  
Note what an excellent view it would have been possible to have from the end of the veranda. Scenery like the mountain in the background should be kept in sight from the front porch.
7. Here the barn is located in front of the house where it not only shuts off the view, but presents an unsightly feature.
8. A number of small buildings scattered about the back yard.  
This arrangement cuts up the space available back of the house and makes improvement of the back yard almost impossible.
9. A well-planned country house.
10. A house with fussy trimmings which detracts from an otherwise attractive place.
11. A hay field at the side of the farm house.  
Note how it increases the apparent size of the grounds.
12. A pasture with a grove of trees which is utilized as part of the home grounds.
13. A plan suggesting how the farm grounds may be arranged.
14. A tennis court located at one side of the farm house where it is convenient for use when a few minutes can be spared.
15. A yard, inclosed by a hedge, which may be used for drying clothes.  
Privacy and shade are secured in this yard.
16. A waterhole or pond, and what an eyesore it is.
17. A very natural treatment of a pond, showing what an attractive part of the grounds it may be made.
18. These grounds are not attractive, because neatness is lacking.
19. This place is attractive principally because of the neat appearance of the grounds.
20. Unprofitable advertising for the farm.
21. Profitable advertising for the farm.
22. A poorly planned driveway which destroys all prospect of a usable front lawn.

No. of  
view.

23. A well-planned driveway which leaves an unbroken lawn in front of the house.
24. A long straight walk which is not as pleasing as a slightly curved one.  
Note also how this walk bisects the lawn.
25. This front lawn is rendered almost useless by the driveway through the center.
26. A plan showing the location of the driveway as in the preceding slide.
27. A plan showing how much more attractive the lawn becomes when the driveway is located at the side of the grounds.
28. This is an entrance that is quite commonly constructed, but it is far from attractive.  
If the posts were cut off to about a foot above the fence and a small neat signboard placed on the post, the entrance would make a much more interesting appearance.
29. An attractive entrance.  
Such an entrance with posts of rough field stone need not be expensive, and it would be durable.
30. An attractive place, due to the presence of a good lawn.
31. This lawn is beautiful because it has a very even stand of grass which has been closely mowed.
32. A planting of evergreens used as a screen for the stable yard.
33. Trees located so they will afford vistas between them of some view beyond.
34. Trees and plantings which obscure any distant views.
35. Some views that would be greatly missed if plantings hid them from sight.
36. Evergreens used as a screen for the clothes yard.
37. A backyard which has been filled up by flower beds, leaving little room for other purposes.
38. A lawn cut up by specimen plants scattered about instead of being grouped.
39. The statues and the flower bed in this view seriously detract from a beautiful lawn.
40. A young well-planted border of flowers with a background of green shrubbery.
41. Where vines give needed shade and privacy on the porch.
42. The upright lines of this house are materially subdued by the vines planted about it.
43. These trees are so placed that they furnish shade and yet do not obscure the view.
44. How rocks may be utilized to furnish interesting features in the grounds.
45. This pergola in the garden adds a very distinctive feature to the place.
46. Some native plants set along the border of the lawn.
47. A wealth of shade about a farmhouse.  
The four trees with light bark are poplars, and these could be cut out and still leave sufficient shade.
48. Notice how the vines soften the appearance of the columns and enhance the beauty of the whole porch.
49. The plantings around this house are annuals and are only temporary.  
Perennials and flowering shrubs are permanent and should be used whenever possible.
50. Two or three vines and one clump of roots made this effective screen for the outbuildings.
51. Country life gives health and happiness to these children.

## REFERENCES.

1. Beautifying the Home Grounds. U. S. Dept. Agr., Farmers' Bul. 185.
2. Lawn Soils and Lawns. U. S. Dept. Agr., Farmers' Bul. 494.
3. The Home Grounds. Cornell Univ. Expt. Sta. Bul. 361.
4. The Illinois Way of Beautifying the Farm. Illinois Expt. Sta. Circ. 170.
5. The Prairie Spirit in Landscape Gardening. Illinois Expt. Sta. Circ. 184.
6. The North Dakota Farmstead. North Dakota Expt. Sta. Circ. 10.
7. Ornamenting Home Grounds. Maine Expt. Sta. Bul. 42.
8. Ornamenting Home Grounds. Wisconsin Expt. Sta. Bul. 105.
9. Ornamental Planting in Nebraska. Nebraska Expt. Sta. Bul. 55.
10. Windbreaks, Hedges, and Ornamentals for the Irrigated Sandy Soils of Eastern Oregon. Oregon Expt. Sta. Bul. 125.
11. Annual Flowering Plants. U. S. Dept. Agr., Farmers' Bul. 195.
12. Lawn Making in California. Univ. Cal. Expt. Sta. Circ. 149.
13. Roses for the Home. U. S. Dept. Agr., Farmers' Bul. 750.









